

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of	:	Jerome Cornet, et al.
	:	
For	:	CONTENT SWITCHING WITH
	:	USER-DEFINED POLICIES
	:	
Serial No.	:	10/715,425
	:	
Filed	:	November 19, 2003
	:	
Art Unit	:	2442
	:	
Examiner	:	Christopher D. Biagini
	:	
Attorney Docket No.	:	ALC 3097
	:	
Confirmation No.	:	5332

APPEAL BRIEF

Mail Stop Appeal Brief Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This Appeal Brief responds to the Notice of Panel Decision from Pre-Appeal Brief Review dated April 12, 2010. A Notice of Appeal was filed on February 12, 2010.

Application No: 10/715,425
Attorney Docket No: ALC 3097

I. REAL PARTY IN INTEREST

The party in interest is Alcatel, by way of an Assignment recorded at Reel 014714, Frame 0842.

II. RELATED APPEALS AND INTERFERENCES

Following are identified any prior or pending appeals, interferences or judicial proceedings, known to Appellant, Appellant's representative, or the Assignee, that may be related to, or which will directly affect or be directly affected by or have a bearing upon the Board's decision in the pending appeal:

NONE.

III. STATUS OF CLAIMS

Claims 1-7 and 9-12 are on appeal.

Claims 1-7 and 9-12 are pending.

No claims are withdrawn.

No claims are allowed.

Claims 1-7 and 9-12 are rejected.

Claim 8 is canceled.

Application No: 10/715,425
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IV. STATUS OF AMENDMENTS

All amendments have been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The subject matter recited in independent claim 1 includes: “A content switch (paragraph [0022], line 2) managed by a network provider (paragraph [0050], line 3) that routes packets associated with a document (paragraph [0019], line 2) to one of a plurality of application providers, wherein each application provider is a trusted customer (paragraph [0050], line 5) of the network provider (paragraph [0050], line 3), in a computer based communications system using instructions recorded on a computer-readable storage medium, the storage medium comprising: instructions in the content switch (paragraph [0022], line 2) that send the document to a parser (paragraph [0020], line 1), the document (paragraph [0019], line 2) referencing a location of corresponding schema instructions in the parser (paragraph [0020], line 1) that fetch the corresponding schema (paragraph [0031], line 1) from the location, wherein the fetched schema (paragraph [0031], line 1) comprises: a plurality of elements, wherein a particular element in the fetched schema (paragraph [0031], line 1) is also found in the sent document (paragraph [0019], line 2), a particular routing rule that redirects (paragraph [0041], line 1) the packets to a particular server when a value of the particular element in the sent document (paragraph [0019], line 2) matches (paragraph [0029], line 2) a predefined value of the particular element in the fetched schema (paragraph [0031], line 1), and a default routing rule (paragraph [0030], line 1) that redirects the packets to a default server when the value of the

particular element in the sent document (paragraph [0019], line 2) does not match the predefined value of the particular element in the fetched schema (paragraph [0031], line 1); instructions in the parser that validate (paragraph [0038], line 1) the sent document (paragraph [0019], line 2) according to the fetched schema (paragraph [0038], lines 1-2); instructions in the parser that pass the validated document (paragraph [0039], line 2) to a routing instruction processor; instructions that interpret the routing rules in the schema (paragraph [0031], line 1), wherein the content switch executes the routing rules; and instructions in the content switch (paragraph [0022], line 2) that use the interpreted routing rules to redirect (paragraph [0041], line 1) the packets associated with the document (paragraph [0019], line 2) to either the particular server or the default server (paragraph [0030], line 1)."

The subject matter recited in independent claim 3 includes: "A method of carrying out content switching (paragraph [0022], line 2) for a plurality of application providers in a network provider (paragraph [0050], line 3) of a computer-based communications system, wherein each application provider is a trusted customer (paragraph [0050], line 5) of the network provider (paragraph [0050], line 3), that uses instructions recorded on a computer-readable storage medium, the medium comprising: instructions that add parsing capabilities to a content switch (paragraph [0022], line 2); instructions that add routing rules to a schema (paragraph [0031], line 1) associated with packets and a document (paragraph [0019], line 2), wherein the schema

(paragraph [0031], line 1) comprises: a plurality of elements, wherein a particular element in the schema is also found in the document (paragraph [0019], line 2), a particular routing rule that redirects (paragraph [0041], line 1) the packets to a particular server when a value of the particular element in the document (paragraph [0019], line 2) matches (paragraph [0029], line 2) a predefined value of the particular element in the schema (paragraph [0031], line 1), and a default routing rule (paragraph [0030], line 1) that redirects the packets to a default server when the value of the particular element in the document (paragraph [0019], line 2) does not match the predefined value of the particular element in the schema (paragraph [0031], line 1); instructions that direct the content switch (paragraph [0022], line 2) to fetch the schema to determine the routing action to be taken on the packets associated with the document (paragraph [0019], line 2) written according to the fetched schema (paragraph [0031], line 1) and containing the reference to the fetched schema (paragraph [0031], line 1), wherein the determination is made by applying the routing rules from the schema (paragraph [0031], line 1) to elements parsed from the document (paragraph [0019], line 2); and instructions that route the packets according to the determined routing action, wherein each application provider, as the trusted customer (paragraph [0050], line 5) of the network provider, defines switching policies, and administrative domains (paragraph [0042], line 6) of the content switch (paragraph [0022], line 2) and application servers (paragraph [0042], line 7) are separated

(paragraph [0042], line 6).”

The subject matter recited in independent claim 5 includes: “A system that routes traffic to application providers in a network provider (paragraph [0050], line 3) of a computer based communications network using instructions recorded on a computer-readable storage medium, wherein each application provider is a trusted customer (paragraph [0050], line 5) of the network provider (paragraph [0050], line 3), the medium comprising: instructions that add parsing capabilities to a content switch (paragraph [0022], line 2); instructions that add routing rules to a schema (paragraph [0031], line 1) associated with packets and a document (paragraph [0019], line 2), wherein the schema (paragraph [0031], line 1) comprises: a plurality of elements, wherein a particular element in the schema (paragraph [0031], line 1) is also found in the document (paragraph [0019], line 2), a particular routing rule that redirects (paragraph [0041], line 1) the packets to a particular server when a value of the particular element in the document (paragraph [0019], line 2) matches (paragraph [0029], line 2) a predefined value of the particular element in the schema (paragraph [0031], line 1), and a default routing rule (paragraph [0030], line 1) that redirects the packets to a default server when the value of the particular element in the document (paragraph [0019], line 2) does not match the predefined value of the particular element in the schema; instructions that direct the content switch (paragraph [0022], line 2) to fetch the schema (paragraph [0031], line 1), interpret the routing rules in the

document (paragraph [0019], line 2) containing the reference to the schema (paragraph [0031], line 1) and written in the language of the schema (paragraph [0031], line 1), and apply the routing rules to elements in the network; and instructions that determine a routing action to be performed on the packets from a packet flow associated with the document (paragraph [0019], line 2), wherein each application provider, as the trusted customer (paragraph [0050], line 5) of the network provider (paragraph [0050], line 3), defines switching policies, and administrative domains (paragraph [0042], line 6) of the content switch (paragraph [0022], line 2) and application servers (paragraph [0042], line 7) are separated (paragraph [0042], line 6)."

The subject matter recited in independent claim 7 includes: "A computer program schema comprising instructions stored on a computer-readable storage medium in a network provider (paragraph [0050], line 3) of a computer based communications system, the medium comprising: instructions that add parsing capabilities to a content switch (paragraph [0022], line 2); instructions that add routing rules to a schema (paragraph [0031], line 1) associated with packets and a document (paragraph [0019], line 2), wherein the schema (paragraph [0031], line 1) comprises: a plurality of elements, wherein a particular element in the schema (paragraph [0031], line 1) is also found in the document (paragraph [0019], line 2), a particular routing rule that redirects (paragraph [0041], line 1) the packets to a particular server when a value of the particular element in the document (paragraph [0019], line 2) matches

(paragraph [0029], line 2) a predefined value of the particular element in the schema (paragraph [0031], line 1), and a default routing rule (paragraph [0030], line 1) that redirects the packets to a default server when the value of the particular element in the document (paragraph [0019], line 2) does not match the predefined value of the particular element in the schema (paragraph [0031], line 1); instructions that enable a particular application provider to specify the routing rules; instructions that direct the content switch (paragraph [0022], line 2) to fetch the schema (paragraph [0031], line 1) to provide routing actions to be taken on the packets associated with the document (paragraph [0019], line 2) containing the reference to the schema and written in the language of the schema (paragraph [0031], line 1); and instructions that route the packets to the application providers, wherein each application provider is a trusted customer (paragraph [0050], line 5) of the network provider (paragraph [0050], line 3) that defines switching policies, and administrative domains (paragraph [0042], line 6) of the content switch (paragraph [0022], line 2) and application servers (paragraph [0042], line 7) are separated (paragraph [0042], line 6).”

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The following grounds of rejection are presented for review:

A. On pages 4-8, the Office Action rejects claims 1-7 and 9-12 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Pub. No. US2003/0028654 to Abjanic (hereinafter “Abjanic”) in view of Pub. No. US2003/0097495 to Horvitz (hereinafter “Horvitz”), further in view of U.S. Patent No. 6,629,149 to Fraser (hereinafter “Fraser”), further in view of U.S. Patent No. 6,591,260 to Schwarzhoff (hereinafter “Schwarzhoff”), and still further in view of the “Java Tutorial” document.

VII. ARGUMENT

A. Rejection of Claims 1-7 and 9-12 Under 35 U.S.C. § 103(a)

The Office Action, dated November 12, 2009, rejects claims 1-7 and 9-12 under 35 U.S.C. § 103(a) as allegedly unpatentable over Abjanic in view of Horvitz, further in view of Fraser, even further in view of Schwarzhoff, and yet further in view of the Java Tutorial document.

As set forth in MPEP § 2143, “the key to supporting any rejection under 35 U.S.C. § 103(a) is the clear articulation of the reason(s) why the claimed invention would have been obvious” (emphasis added). Moreover, an Examiner must also “resolve the *Graham* factual inquiries.” Here, the Office Action fails to present either clear articulation of the reasons or resolution of the factual inquiries. Thus, Appellant respectfully submits that the Office Action fails to present a *prima facie* case to support any of the obviousness rejections. In addition, even assuming *arguendo*, the sufficiency on its face of the Examiner’s stated reasoning for the combination, Appellant respectfully submits that the references fail to support the reasoning because they fail to disclose, alone or in combination (which Appellant disagrees with), subject matter meeting a number of the recited elements interpreted according to their broadest reasonable meaning.

1. Independent Claims 1, 3, 5, and 7

Claim 1 recites, in part: “wherein each application provider is a trusted

customer of the network provider” (emphasis added). Independent claims 3, 5, and 7 recite similar subject matter. Appellant respectfully submits that the references of record, alone or in combination, fail to disclose, teach, or suggest this subject matter.

On page 2, the Office Action alleges that “the concept of ‘trust’ is extraordinarily broad” and proceeds to essentially ignore this language. In particular, the Office Action alleges that any customer is “trusted” in some way. In response, Appellant respectfully submits that this position is inconsistent with the Office Action’s subsequent application of Fraser. There would be no need to “modify the system of Abjanic with the trust and management taught by Fraser” if Abjanic had those features. Moreover, Appellant respectfully submits Abjanic lacks this feature and that Fraser fails to remedy the deficiencies of Abjanic.

In this case, “trust” would refer to some contract established between an SP and a CP, such as a Service Level Agreement (SLA). The contract would define which XACSEs from the SP could be accessible for XML routing updates by the CP, which schema to use, which routing performance would be offered by the SP, and any limitations on scope. Thus, Appellant respectfully submits that it was improper for the Office Action to assume that “trust” had no particular meaning.

On page 7, the Office Action alleges that col. 15, line 45 to col. 16, line 10 of Fraser provide this subject matter. In response, Appellant respectfully submits that Fraser lacks any disclosure of the recited relationship between application and network

providers. Instead, the cited section of Fraser actually describes “inline agents” that “must be trusted because they manipulate packet headers.” Such inline agents are not equivalent to the recited application providers.

Independent claim 1 recites, in part: “the document referencing a location of a corresponding schema” (emphasis added). Independent claims 3, 5, and 7 recite similar subject matter. Appellant respectfully submits that the references of record, alone or in combination, fail to disclose, teach, or suggest this subject matter.

On page 3, the Office Action dismisses this subject matter, alleges that it is unclear how a document referencing that location somehow precludes it from being “central” of “generally available.” In response, Appellant respectfully submits that the alleged combination provides no information regarding the location of the corresponding schema. Indeed, the Office Action’s allegation of it being “generally available” would teach away from referencing a particular location.

On page 6, the Office Action alleges that Schwarzhoff provides this subject matter. In response, Appellant respectfully submits that Schwarzhoff actually does not reference the location of a schema with a document. Instead, as defined in line 9 of col. 9, Schwarzhoff can “locate and retrieve the schema by use of the URI.” The URI (Uniform Resource Identifier) is located by searching a LDAP directory. The LDAP (Lightweight Directory Access Protocol) directory also is not a document. In contrast, Appellant respectfully submits that the recited “location” would be a technically

accurate (physical, addressable) specification, such as an exact URL or a complete file path and name (directory structure, actual file name).

Independent claim 1 further recites: “instructions in the **parser** that **fetch** the corresponding schema” (emphasis added). Independent claims 3, 5, and 7 recite similar subject matter. Appellant respectfully submits that the references of record, alone or in combination, fail to disclose, suggest, or teach this subject matter.

As correctly conceded on page 6 of the Office Action, Abjanic fails to explicitly show a schema document. Moreover, Abjanic teaches away from the claimed invention. As recited in paragraph [0030] of Abjanic, XML switching is offloaded from application servers to a network apparatus. Therefore, Abjanic’s use of an XML director in a network apparatus to route or direct messages, as recited in paragraph [0028], would teach away from the claimed subject matter of having routing rules within a schema. Appellant respectfully submits that the Office Action fails to provide articulated reasoning to justify the combination of inconsistent excerpts from multiple prior art references.

Independent claim 1 also recites: “instructions in the parser that **validate** the sent document according to the fetched schema” (emphasis added). Independent claims 3, 5, and 7 recite similar subject matter. Appellant respectfully submits that the references of record, alone or in combination, fail to disclose, suggest, or teach this subject matter.

On pages 6 and 7, the Office Action alleges that Schwarzhoff discloses fetching of a schema document and validation of a document according to the fetched schema. In particular, the Office Action alleges that Schwarzhoff could be applied to Abjanic's system to "ensure that the documents conform to the expected format." However, Schwarzhoff's teachings are actually drawn to polymorphic schemas. As disclosed in lines 20-24 of col. 6 in Schwarzhoff, to support polymorphic schemas, the schemas must be available in a generally available repository and have globally unique names. As described above, these centralized teachings teach away from the claimed invention.

Independent claim 1 also recites: "instructions in the parser that **pass the validated document** to a routing instruction processor" (emphasis added). Similar recitations appear in the other independent claims. Appellant respectfully submits that the references of record, alone or in combination, fail to disclose, suggest, or teach this subject matter.

On page 5, the Office Action relies upon paragraphs [0059] and [0083] of Abjanic for "instructions that pass the document to a routing instruction processor" and refers to "content based switching decision logic." In response, Appellant respectfully submits that Abjanic fails to disclose a **validated** document. Moreover, Abjanic's director [145: Fig. 5] does not pass the validated document to a routing instruction processor. Appellant respectfully submits that paragraph [0039] the specification of the current application clearly discloses a distinct step of passing a validated document to an XML

routing instruction processor to get the routing information. Abjanic clearly does not disclose this step.

For the reasons listed above, Appellant respectfully submits that independent claims 1, 3, 5, and 7 are allowable over the cited references.

2. Dependent Claims 2, 4, 6, and 9-12

Claims 2 and 9 depend from claim 1, claim 4 and 10 depend from claim 3, claims 6 and 11 depend from claim 5, and claim 12 depends from claim 7. Thus, claims 2, 4, 6, and 9-12 are also allowable at least due to their respective dependencies from allowable claims.

3. Conclusion

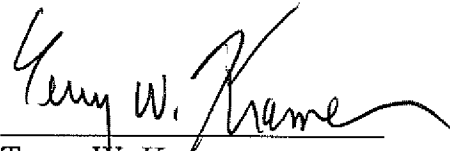
As detailed above, the Office Action fails to present either clear articulation of the reasons or resolution of the factual inquiries required for a determination of obviousness. In addition, as detailed above, Appellant respectfully submits that the references fail to disclose, alone or in combination, a number of recited elements of each of the claims discussed above. Therefore, Appellant respectfully submits that the Office Action fails to present a *prima facie* case to support any of the obviousness rejections.

Accordingly, Appellant respectfully requests withdrawal of the rejections of claims 1-7 and 9-12 under 35 U.S.C. § 103(a).

CONCLUSION

For at least the reasons discussed above, Appellant respectfully submits that the rejections are in error and that claims 1-7 and 9-12 are in condition for allowance. Therefore, Appellant respectfully requests that this Honorable Board reverse the rejections of claims 1-7 and 9-12.

Respectfully submitted,
KRAMER & AMADO, P.C.

A handwritten signature in black ink, appearing to read "Terry W. Kramer", written over a horizontal line.

Terry W. Kramer
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Date: April 26, 2010

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VIII. CLAIMS APPENDIX

CLAIMS INVOLVED IN THE APPEAL:

1. (Previously Presented) A content switch managed by a network provider that routes packets associated with a document to one of a plurality of application providers, wherein each application provider is a trusted customer of the network provider, in a computer based communications system using instructions recorded on a computer-readable storage medium, the storage medium comprising:

instructions in the content switch that send the document to a parser, the document referencing a location of a corresponding schema;

instructions in the parser that fetch the corresponding schema from the location, wherein the fetched schema comprises:

a plurality of elements, wherein a particular element in the fetched schema is also found in the sent document,

a particular routing rule that redirects the packets to a particular server when a value of the particular element in the sent document matches a predefined value of the particular element in the fetched schema, and

a default routing rule that redirects the packets to a default server when the value of the particular element in the sent document does not match the predefined value of the particular element in the fetched schema;

instructions in the parser that validate the sent document according to the fetched schema;

instructions in the parser that pass the validated document to a routing instruction processor;

instructions that interpret the routing rules in the schema, wherein the content switch executes the routing rules; and

instructions in the content switch that use the interpreted routing rules to redirect the packets associated with the document to either the particular server or the default server.

2. (Previously Presented) The content switch as recited in claim 1, further comprising:

instructions that parse Extensible Markup Language (XML).

3. (Previously Presented) A method of carrying out content switching for a plurality of application providers in a network provider of a computer-based communications system, wherein each application provider is a trusted customer of the network provider, that uses instructions recorded on a computer-readable storage medium, the medium comprising:

instructions that add parsing capabilities to a content switch;

instructions that add routing rules to a schema associated with packets and a document, wherein the schema comprises:

a plurality of elements, wherein a particular element in the schema is also found in the document,

a particular routing rule that redirects the packets to a particular server when a value of the particular element in the document matches a predefined value of the particular element in the schema, and

a default routing rule that redirects the packets to a default server when the value of the particular element in the document does not match the predefined value of the particular element in the schema;

instructions that direct the content switch to fetch the schema to determine the routing action to be taken on the packets associated with the document written according to the fetched schema and containing the reference to the fetched schema, wherein the determination is made by applying the routing rules from the schema to elements parsed from the document; and

instructions that route the packets according to the determined routing action, wherein each application provider, as the trusted customer of the network provider, defines switching policies, and administrative domains of the content switch and application servers are separated.

4. (Previously Presented) The method as recited in claim 3, further comprising:
instructions that use Extensible Markup Language (XML).
5. (Previously Presented) A system that routes traffic to application providers in a network provider of a computer based communications network using instructions recorded on a computer-readable storage medium, wherein each application provider is a trusted customer of the network provider, the medium comprising:
instructions that add parsing capabilities to a content switch;
instructions that add routing rules to a schema associated with packets and a document, wherein the schema comprises:
a plurality of elements, wherein a particular element in the schema is also found in the document,
a particular routing rule that redirects the packets to a particular server when a value of the particular element in the document matches a predefined value of the particular element in the schema, and
a default routing rule that redirects the packets to a default server when the value of the particular element in the document does not match the predefined value of the particular element in the schema;
instructions that direct the content switch to fetch the schema, interpret the routing rules in the document containing the reference to the schema and written in the language of the schema, and apply the routing rules to elements in the network;
and

instructions that determine a routing action to be performed on the packets from a packet flow associated with the document, wherein each application provider, as the trusted customer of the network provider, defines switching policies, and administrative domains of the content switch and application servers are separated.

6. (Previously Presented) The system as recited in claim 5, further comprising:
instructions that parse Extensible Markup Language (XML).

7. (Previously Presented) A computer program schema comprising instructions stored on a computer-readable storage medium in a network provider of a computer based communications system, the medium comprising:

instructions that add parsing capabilities to a content switch;

instructions that add routing rules to a schema associated with packets and a document, wherein the schema comprises:

a plurality of elements, wherein a particular element in the schema is also found in the document,

a particular routing rule that redirects the packets to a particular server when a value of the particular element in the document matches a predefined value of the particular element in the schema, and

a default routing rule that redirects the packets to a default server when

the value of the particular element in the document does not match the predefined value of the particular element in the schema;

instructions that enable a particular application provider to specify the routing rules;

instructions that direct the content switch to fetch the schema to provide routing actions to be taken on the packets associated with the document containing the reference to the schema and written in the language of the schema; and

instructions that route the packets to the application providers, wherein each application provider is a trusted customer of the network provider that defines switching policies, and administrative domains of the content switch and application servers are separated.

8. (Canceled).

9. (Previously Presented) The content switch of claim 1, wherein the fetched schema comprises a plurality of particular routing rules and a plurality of predefined values of the particular element in the fetched schema, each of the particular routing rules redirects the packets to a different server, and each of the particular routing rules corresponds uniquely to one of the predefined values.

10. (Previously Presented) The method of claim 3, wherein the schema comprises a plurality of particular routing rules and a plurality of predefined values of the particular element in the schema, each of the particular routing rules redirects the packets to a different server, and each of the particular routing rules corresponds uniquely to one of the predefined values.

11. (Previously Presented) The system of claim 5, wherein the schema comprises a plurality of particular routing rules and a plurality of predefined values of the particular element in the schema, each of the particular routing rules redirects the packets to a different server, and each of the particular routing rules corresponds uniquely to one of the predefined values.

12. (Previously Presented) The schema of claim 7, wherein the schema comprises a plurality of particular routing rules and a plurality of predefined values of the particular element in the schema, each of the particular routing rules redirects the packets to a different server, and each of the particular routing rules corresponds uniquely to one of the predefined values.

IX. EVIDENCE APPENDIX

A copy of the following evidence 1) entered by the Examiner, including a statement setting forth where in the record the evidence was entered by the Examiner, 2) relied upon by the Appellant in the appeal, and/or 3) relied upon by the Examiner as to the grounds of rejection to be reviewed on appeal, is attached:

NONE.

X. RELATED PROCEEDINGS APPENDIX

Copies of relevant decisions in prior or pending appeals, interferences or judicial proceedings, known to Appellant, Appellant's representative, or the Assignee, that may be related to, or which will directly affect or be directly affected by or have a bearing upon the Board's decision in the pending appeal are attached:

NONE.